Berry, Lydia

From: John Baranowski [jbaranowski@treetop.com]
Sent: Tuesday, January 22, 2002 2:13 PM
To: Berry, Lydia
Cc: sue graf; Jerry Kobes
Subject: United States Standards for Grades of Apple Juice from concentrate


tmp.htm


USDA draft
mments submitted..

Tree Top, Inc.
111 South Railroad Avenue
Selah, WA 98942
(509) 697-7251
Fax: (509) 698-1446

January 22, 2002

Ms. Lydia E. Berry
Processed Products Branch
AMS Fruit and Vegetable Programs
USDA Stop 0247
1400 Independence Avenue SW
Washington, DC 20250-0247

Via e-mail: Lydia.Berry@USDA.gov

Subject: (United States Standards for Grades of Apple Juice from Concentrate)
66 Federal Register 58430 November 21, 2001

Dear Ms. Berry,

This letter is written on behalf of the technical services group of Tree Top, Inc., a grower-owned fruit processing cooperative headquartered in Selah, Washington. Our processed products include applesauce, apple juice, apple juice concentrate, sliced apples and dehydrated apples.

Tree Top, Inc. would like to submit these comments regarding the new grade standards.

This document is somewhat based on a proposed standard prepared by PAI in 1996. Since that time, two major additions have been made:

1. Product description: "Apple juice is the unfermented juice obtained from ***the first pressing***..." this would preclude any leaching of the apple solids, and thus would require a special process for apple juice concentrate preparation that would be un-economical. Leaching of solids is, of course, a standard practice for apple juice concentrate production.

The "Proposed Draft Codex General Standard for Fruit Juices and Nectars" defines ***juice*** as the liquid obtained by suitable physical means, recognizing that "presses" may or may not be used in its manufacture. The simple requirement for "pressed" juice would eliminate many of the larger domestic apple juice concentrate processors from producing raw materials that would be useable under this Draft proposal.

2. Brix/acid ratios: As described in the Draft Standard, grades for apple juice from concentrate would depend on a specific Brix:acid ratio range, as well as minimum and maximum allowed acid. The two sets of specifications are out of alignment with one

another in the Draft document, e.g. the Maximum Brix-acid ratio allowed for "good flavor and aroma" is a 53:1. At 11.5 Brix (the minimum allowed), this would be a 0.217 acid (g acid/100 gram juice), even though the stated minimum acid is 0.24 g acid/100 grams juice. In the same manner, a stated minimum Brix-acid ratio of 21:1 at minimum brix would equate to 0.548 g acid/100 gram juice, although the document would allow up to 0.67g acid/100 gram juice.

Acid is measured in g/100g, even though virtually the entire industry uses g/100 ml for single strength juice analysis. An acid of 0.24 g/100 g would be equivalent to 0.25 g/100 ml, or a 0.217 acid (w/w) would be equivalent to 0.226 g/100 ml.

From a palatability standpoint, a 0.67 g/100 gram acid upper limit is probably beyond the mean for most user groups, and the 0.548 g/100g would be more reasonable. The difference between 0.217 and 0.24 g/100 g is hardly significant, although there are major apple juice concentrate customers that specify a lower limit between the two—thought should be given to their customer base and whether their specification represents a significant portion of the potential users of apple juice produced under this Standard.

While the Brix:acid ratio is a commonly used measure in the citrus industry, it is normally not used in the apple industry. Typical measurements are simply the amount of acid (g/100 ml) at a specified Brix.

3. **Grade Requirements:** Although a request was made to the PAI technical committee to provide quantitative measurements for color, clarity and absence of defects in 1999, none of our recommendations made their way into the Draft proposal. The quality attributes described in the Draft Standard are subjective. Objective measurements of light transmittance and turbidity should be used.

Sincerely,

Gerald Kobes
Vice President of Engineering and Technical Support

John Baranowski, Ph. D.
Director of Technical Services